

REMARKS/ARGUMENTS

The Examiner is thanked for the review of the application.

Claims 4-13 remain in this application. No Claims have been amended. No new claims have been added. No new matter has been added.

In the supplemental Non-Final Office Action dated October 10, 2007, the Examiner rejected Claims 4-13 under 35 U.S.C. 103(a) as being unpatentable over Jamison (USP 5,970,879).

The Examiner states that "Jamison discloses a gun chamber (figure 2 element 16) for use with a gun action and barrel and configured for accepting a gun cartridge having a proximal and distal end for propelling a bullet of a pre-determined weight, the gun chamber having a case section (near the element number 16) proximal to the gun action and configured for housing a cartridge case, a free bore section (41) proximal to the barrel and distal end of the cartridge case, a shoulder section (angled section to the left of element 40 in figure 2A) at the proximal end angling inward from the case section, a neck portion (terminating in element 40) located between the shoulder section and the free bore section wherein the neck portion is configured for accepting a cartridge having a mouth for accepting a bullet, **wherein the length of the case section is inherently dependent upon water weight volume of the cartridge case, the bore diameter of the gun barrel, and the weight of the bullet.**" (Emphasis added).

The Examiner further states that "Jamison further discloses that the shoulder section angles inward at an angle of 30 degrees (col. 6, line 18), and a sum of the case section, shoulder section, neck section, and free bore section having a maximum total length of 4.0 inches (col. 4, lines 12-13, where the value as described in the claim is equal to L plus the section 41. L can be calculated to be max at 2.35, and the section 41 is very small relative to that amount, so it does not exceed 4.0 inches total). Further, the case section has a length (L) of between 1.9 and 2.5 inches, as shown above. **Jamison does not disclose a 50-caliber cartridge with the measurements and ranges as claimed.**" (Emphasis added).

Regarding this rejection, the Examiner also maintains that “Jamison discloses the claimed invention **except for the water weight volume of the casing in grains multiplied by the bore diameter of the mouth in thousandths of an inch divided by the weight of the bullet in grains is greater than or equal to 110 and less than or equal to 145. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the bullet properties in that range, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.**” (Emphasis added).

Finally, the Examiner states that “Jamison discloses the claimed invention except for that the cartridge is a 50-caliber gun cartridge with a diameter of approximately 0.668 inches at the distal end and a mouth with a bore diameter of approximately .510 inches.” The Examiner believes “[I]t would have been obvious to one of ordinary skill in the art at the time the invention was made to provide those values for a 50-caliber cartridge, **since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.**” (Emphasis added).

Applicants respectfully traverse the rejection. Applicants believe that Jamison does not render the present invention obvious since: 1) the subject matter claimed in Claims 4 and 9 are not disclosed by Jamison; 2) the working ranges disclosed are not generated through normal testing by one skilled in the art; and 3) the disclosure of Jamison explicitly bars it from being appropriate prior art for the caliber bullets disclosed by Claims 4-13. Further discussion of the Applicants arguments is given below.

Applicants respectfully assert that Jamison does not disclose “wherein the length of the case section is inherently dependent upon water weight volume of the cartridge case, the bore diameter of the gun barrel, and the weight of the bullet” as claimed in Claims 4 and 9. Instead, Jamison appears to simply disclose “maximizing the powder-carrying capacity [by having] the ratio of the **overall case length L over such diameter D** (i.e., L/D) should be no more than about 4.2.” (Emphasis added). (See Column 4, lines 3-5). Thus, Jamison appears to disclose wherein the length of the case section is dependent upon diameter size without regard to weight of the bullet. As such,

the disclosed invention as claimed in Claims 4 and 9, which utilize weight in determination of cartridge length, are novel and non-obvious over Jamison.

Furthermore, Applicants agree that Jamison does not disclose “a 50-caliber cartridge with the measurements and ranges as claimed” in Claims 4 and 9. Nor does Jamison disclose “the water weight volume of the casing in grains multiplied by the bore diameter of the mouth in thousandths of an inch divided by the weight of the bullet in grains is greater than or equal to 110 and less than or equal to 145” as claimed in Claims 4 and 9. Applicants respectfully believe, however, that these measurements and ranges are not values that merely involve only routine skill in the art to determine.

In support of this view, Applicants respectfully bring the Examiner’s attention to In re Sebek, 465 F.2d 904, 907, 175 USPQ 93, 95 (CCPA 1972) which states that “while it may ordinarily be the case that determination of optimum values for parameters of a prior art process would be at least prima facie obvious, that conclusion depends upon what the prior art discloses with respect to those parameters.” Moreover, a simple statement that it would have been obvious to optimize the parameters of a product is insufficient to establish a prima facie case of obviousness. See In re Antonie, 559 F.2d 618, 620, 195 USPQ 6, 8 (CCPA 1977). Since Jamison appears to not recognize length, diameter and weight of the chamber as interrelating, Applicants assert that the values disclosed in Claims 4-13 are not obviousness in light of Jamison.

Lastly, Applicants assert that the disclosure of Jamison appears to be only practicable in caliber ranges from 0.224 to 0.458. See Column 3, lines 40-44, which states “nominal bullet diameters of 0.224, 0.243, 0.257, 0.264, 0.277, 0.284, 0.308, 0.338, 0.358, 0.375, 0.416, and 0.458 **are all practical for use** in the high performance short cartridge of the present invention.” (Emphasis added). Jamison distinctly fails to mention 50 caliber bullets or equivalents, which are the bullet type utilized in Claims 4-13. As such, Applicants assert that Jamison is not appropriate prior art, and does not teach or suggest the invention of Claims 4-13.

In sum, Applicants believe that all pending claims 4-13 are now allowable over the cited art and are also in allowable form and respectfully request a Notice of Allowance for this application from the Examiner. The commissioner is authorized to charge any additional fees that may be due to our Deposit Account No. 50-2766 (Order No. FAS-003-US). Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at telephone number 925-570-8198.

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